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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,446	08/22/2001	Enrique Musoll	MIPS.0181-00-US	9578
23669	7590	01/08/2008		
HUFFMAN LAW GROUP, P.C. 1900 MESA AVE. COLORADO SPRINGS, CO 80906			EXAMINER CHOUDHURY, AZIZUL Q	
			ART UNIT	PAPER NUMBER
			2145	
			NOTIFICATION DATE	DELIVERY MODE
			01/08/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO@HUFFMANLAW.NET

<b>Office Action Summary</b>	<b>Application No.</b> 09/935,446	<b>Applicant(s)</b> MUSOLL, ENRIQUE	
	<b>Examiner</b> AZIZUL CHOUDHURY	<b>Art Unit</b> 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20, 22 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20, 22 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Detailed Action***

This office action is in response to the correspondence received on October 25, 2007.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20, 22 and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Matic et al (NPL: "Predictive Playout Delay Adaptation for Voice over Internet) in view of Luke (US Patent No: 6,622,173), hereafter referred to as Matic and Luke, respectively.

1. With regards to claims 1, 9 and 17, Matic teaches through Luke, a packet buffering system for predicatively processing data packets in a data packet network, the data packets associated with a plurality of data flows, the data flows from a plurality of protocols, the system comprising: at least one input port for receiving data packets from a plurality of sources (Input port is inherent since Matic's design is for use in a network system), wherein the received data packets arrive from the plurality of data flows, interspersed (Packets arrive out of order (p. 348, column 2, 1<sup>st</sup> paragraph, Matic)); at least one output port for sending out data packets to a plurality of destinations (Output port is inherent since Matic's

design is for use in a network system); a packet predictor, coupled to said least one input port, for predicting information about a future packet in any one of the plurality of data flows based on history of previously received packets from the plurality of data flows, said history stored in a memory coupled to said packet predictor (Packets are recorded and it's information is used to predict traffic; Abstract and p. 348, 2<sup>nd</sup> column, 6<sup>th</sup> paragraph, Matic); a plurality of queues for storing packets received from said plurality of sources, and for storing said predicted information about said future packet (Matic's design stores packet information as input to the predictor; Abstract, Matic); direction logic, coupled to said packet predictor, for generating a Packet ID for said future packet, wherein said Packet ID is stored in one of said plurality of queues; buffer logic, coupled to said packet predictor, for validating said predicted information about said future packet based on access to said memory; and a processing core, coupled to said plurality of queues, wherein if said buffer logic validates said predicted information, notification is made to said direction logic which passes said Packet ID for said future packet to said processing core to initiate speculative processing (Section 3, p. 350, subsection A [Learning], Matic).

However, Matic does not disclose the generation and storage of packet identification for future/predicted packets. Nor does Matic teach sending verification of the prediction. In the same field of endeavor, Luke also teaches a packet prediction system. Luke teaches how predicted packets are represented by a Packet ID (equivalent to the numbers in figure 3, box 22, left column under

header "Packet"). In addition, Luke also teaches how notifications (equivalent to Luke's checksums) are sent to the transmitting buffer to validate the prediction (column 2, lines 18-30 and column 3, lines 29-41, Luke). Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Matic, with those of Luke, to provide for communication of prediction checksums from a receiving proxy to a transmitting proxy (column 2, lines 26-28, Luke).

2. With regards to claims 2, 10, 18 and 19, Matic teaches through Luke, the system wherein the data packet network is the Internet network (p. 348, section 1, 1<sup>st</sup> paragraph, Matic).
3. With regards to claims 3 and 11, Matic teaches through Luke, the system wherein the packet predictor utilizes a history record periodically updated by the system, to generate predicted data (p. 348, Abstract, Matic).
4. With regards to claims 4 and 12, Matic teaches through Luke, the system wherein the history record comprises characteristics of recently received data packets (p. 348, Abstract, Matic).

5. With regards to claims 5 and 13, Matic teaches through Luke, the system wherein the history record further comprises results of past predictions (Section 5, p. 351, Matic).
6. With regards to claims 6 and 15, Matic teaches through Luke, the system wherein said packet predictor predicts specific characteristics, comprising one or more of packet type, packet flow identification, sender information, destination information, and packet size for said future packet (Section 1, p. 348, 2<sup>nd</sup> column, 6<sup>th</sup> paragraph, Matic).
7. With regards to claims 7, Matic teaches through Luke, the system comprising a packet router (Matic's design is used in a network such an Internet, such claimed feature is inherent (Section 1, Matic)).
8. With regards to claims 8 and 16, Matic teaches through Luke, the system comprising a data server (Matic's design is used in a network such an Internet, such claimed feature is inherent (Section 1, Matic)).
9. With regards to claim 14, Matic teaches through Luke, the packet predictor system wherein the history record is stored in a memory accessible to the system (Matic's design uses recorded/history information for predicting (Abstract, Matic). For a computing system to use data, it is inherent that such data must be stored).

10. With regards to claim 20, Matic teaches through Luke, the method comprising a step for maintaining a history of either or both of packets actually received and results of prior predictions (Abstract, Matic).

11. With regards to claims 22 and 24, Matic teaches through Luke, the method wherein said step of processing is abandoned if it is determined not to agree with the real data once it arrives (Section 5, Matic).

12. The obviousness motivation applied to claims 1, 9 and 17, are applicable to all their respective dependent claims.

### ***Remarks***

The amendment received on October 25, 2007 has been carefully examined but is not deemed fully persuasive. The following are the examiner's response to the applicant's arguments.

The first point of contention involves the claimed Packet ID. The applicant claims that neither prior arts teach the claimed Packet ID and explained further how Packet ID is different from the PktNum taught by Luke. A further review of the prior art has made clear though that Luke teaches the claimed Packet ID and it is deemed equivalent to the numbers in figure 3, box 22, left column under header "Packet".

The second point of contention involves the claimed validating step. The applicant argues that Luke teaches accessing the Message Store after the checksum is validated (wherein the checksum has been deemed equivalent to the validation step) whereas the claim accesses memory first and then validates. This would be correct, only if the Luke design didn't access at least one memory before validating (using checksum). However, it is impossible for a digital design to read, write, validate, edit, or handle data without it being in memory of some form. Hence, the claimed accessing of memory prior to validating is inherent.

The third point of contention involves the claimed traits of claims 6 and 15. The claim cites the packet predictor as predicting specific characteristics comprising one or more of packet type, packet flow identification, sender information, destination information, and packet size for said future packet. The applicant contends that neither prior art teach such features, the examiner disagrees. Section 1, p. 348, 2<sup>nd</sup> column, 6<sup>th</sup> paragraph of the Matic art teaches, "To achieve this goal we need to know characteristics of jitter in advance. Hence, a main component of smoother on a receiver side is a jitter predictor." This means jitter is a receiving characteristic/information making it equivalent to the claimed destination information.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIZUL CHOUDHURY whose telephone number is (571)272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC

/Jason D Cardone/  
Supervisory Patent Examiner, Art Unit 2145